Amendments to the substitute specification:

On page 1, after the title and before paragraph [0001], please insert

--Background of the Invention--

On page 8, between paragraphs [0020] and [0021], please insert

--Summary of the Invention--.

On page 9, between paragraphs [0023] and [0024], please insert

--Brief Description of the Drawings--.

Figure 1 shows the metabolic pathway of cysteine and derivatives glutathione and methionine.

Figure 2 shows a graph of the effect of cysteine on the activity of serine acetyltransferase from pea (Pisum sativum).

Figure 3 shows a model of inhibition of chloroplast serine acetyltransferase.

Figure 4 shows the nucleotide and protein sequences of the SAT 3 (L34076) isoform from A. thaliana (SEQ ID NO: 1).

Figure 5 shows the nucleotide and protein sequences of the SAT 3' (U30298) isoform from A. thaliana (SEQ ID NO: 3).

Figure 6 shows the nucleotide and protein sequences of the SAT1' (L78443) isoform from A. thaliana (SEQ ID NO: 5).

Figure 7 shows the nucleotide and protein sequences of the SAT1 (U22964) isoform from A. thaliana (SEQ ID NO: 7).

Figure 8 shows the nucleotide and protein sequences from mRNA of the putative chloroplast serine acetyltransferase SAT2 from A. thaliana (L78444) (SEQ ID NO: 9).

Figure 9 shows the nucleotide and protein sequences from mRNA of the putative chloroplast SAT4 from A. thaliana (SEQ ID NO: 11).

Figure 10 is the sequence comparison of serine acetyl transferase from A. thaliana and other organisms.

Figure 11 shows the process for insertion of OTP/serine acetyltransferase SAT3 or cysteine insensitive SAT such as truncated SAT in the vector pBI121.

Figure 12 shows the process for insertion of serine acetyl transferase SAT1', SAT 1, SAT 2, SAT 3, SAT 3', SAT 4 or any SAT in the vector pBI121.

Figure 13 shows an analysis of the amount of free sulphur compounds associated with the SAT 1 or SAT 3 transgene expression in the plant cell.

Figure 14 shows an analysis of the free cysteine content associated with the SAT 1 or SAT 3 transgene expression in the plant cell.

Figure 15 shows a graph of the correlation between amount of cellular OAS and cysteine level.

Figure 16 shows a comparison between the SAT 1 and SAT 3 activity associated with the chloroplast compartment and that measured in the total extract.

Figure 17 shows a correlation between glutathione and cysteine levels in transgenic plant cells and in control cells.

Figure 18 shows a graph of the correlation between methionine and cysteine levels in transgenic plant cells and in control cells.

Figure 19 shows a comparison of the OASTL activity in SAT 1 and SAT 3 transgenic plant cells with the SAT activity in control cells.

Figure 20 is a Western blot showing the increased activity of OASTL in transgenic plant cells and in control cells.

Figure 21 shows an analysis of plants at the TO stage showing an increase in free cysteine in transgenic SAT 1 cells.

Figure 22 shows a graph of the level of glutathione in transgenic cells expressing SAT 1 correlated to the level of cysteine.

On page 9, immediately before paragraph [0024], please insert

--Detailed Description of the Invention--.

Please replace paragraph [0111] with the following rewritten paragraph:

-- [0111] Analysis of the N-terminal portion sequence shows the presence of characteristics for addressing of the protein to an organelle (mitochondrion or chloroplast). The SAT4 gene, like that of SAT2, is complex and has several introns. Comparing SAT4 sequences with its homologues from *A. thaliana*, from plants and from other organisms, leads to the assumption of a prokaryotic origin (**Figure** 10). Moreover, analysis of the N-terminal sequence using the chloroP program ~~[http://www.cbs.dtu.dk/services/chlorP/]~~, indicates a high probability of the

presence of a chloroplast-type transit peptide. **Figure 10** represents the sequence comparison and was carried out using the Clustaw program (Vector NTI software). SAT2 and SAT4 are closer to the prokaryotic SATs than are SAT3, SAT1 and SAT52. Moreover, the branch also comprises an SAT from red alga (AB00848), which has been identified as a cysteine-sensitive protein located in the chloroplast ([32] Toda et al., 1998, Biochim. Biophys. Acta 1403, 72-84). SAT4 is identified as being on chromosome 4 (Bac clone F8D20, access number AL031135).--